

2. (currently

amended) The surfactant composition of Claim 1, characterized in that the surfactant composition comprises

[(A)] 20 to 60 wt%, referring to the components (A) and (B), of one or more gemini surfactant(s) [and,

(B) referring to the remainder, based on the total of components (A) and (B), one or more detergent component(s)].

3. (Original) A surfactant composition according to any one of claims 1 or 2, further comprising

(C) at least 0.1 wt% water, referring to the total composition.

4. (Original) A surfactant composition according to any of claims 1 or 2, further comprising

(D) at least 0.1 wt% of one or more oil component(s), referring to the total composition.

5. (Cancelled)

6. (Cancelled)

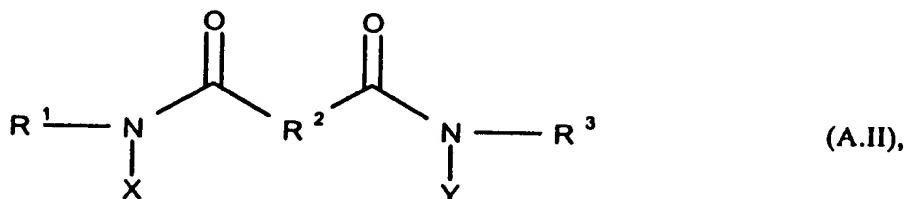
7. (Original) A surfactant composition according to any of claims 1 or 2, characterized in that the surfactant composition comprises, as a detergent component, acyllactylates, acylglutamates, and mixtures thereof

- $$\begin{array}{c} \text{O} \\ \parallel \\ \text{R}^1 - \text{C} - \text{N} - \text{R}^2 - \text{N} - \text{C} - \text{O} \\ | \qquad | \\ \text{X} \qquad \text{Y} \end{array} \quad (\text{A.I.})$$

wherein the substituents have the following meanings:

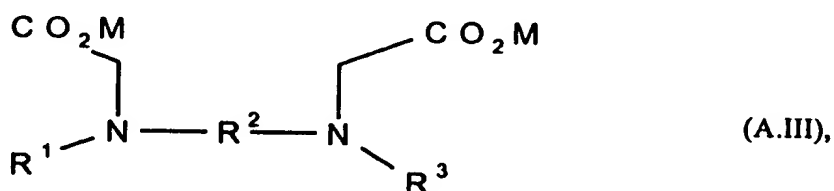
R¹, R³ C₅- to C₂₅-alkyl group that can be branched, unbranched, saturated, or unsaturated as far as not adjacently diunsaturated;
R² C₁- to C₁₂-alkylene;
X, Y (C₂H₄O-)_x(C₃H₆O-)_y-FR; x+y ≥ 1, x: 0-15, y: 0-10; and
FR -SO₃M, -CH₂-CO₂M, -P(O)(OM)₂, H, -C₃H₆SO₃M, -CH₂(CHOH)₄CH₂OH, insofar as x+y=0, wherein M = alkali, (alkyl)ammonium, alkanol ammonium, H, or ½ alkaline earth.

15. (Original) A surfactant composition according to any of claims 1 or 2, characterized in that the gemini surfactant has the general formula (A.II)



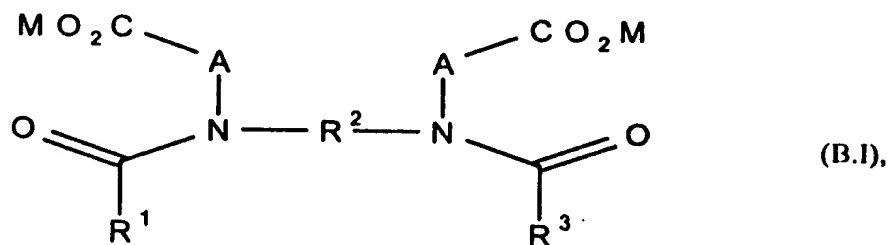
wherein the substituents have the meanings as defined by the general formula (A.I).

16. (Original) A surfactant composition according to any of claims 1 or 2, characterized in that the gemini surfactant has the general formula (A.III)



wherein the substituents have the meanings as defined by the general formula (A.I).

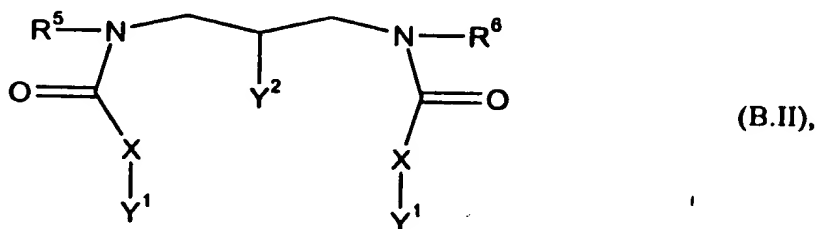
17. (Original) A surfactant composition according to any of claims 1 or 2, characterized in that the gemini surfactant has the general formula (B.I)



wherein the substituents have the following meanings:

- R¹, R³** C₅- to C₂₅-alkyl group that can be branched, unbranched, saturated, or unsaturated as far as not adjacently diunsaturated;
- R²** C₁- to C₁₂-alkylene;
- A** CHR⁴, CH₂, C₂H₄, C₃H₆, C₄H₈;
- R⁴** aminocarboxylic acid radical; and
- M** alkali, (alkyl)ammonium, alkanol ammonium, H, or ½ alkaline earth.

18. (Original) A surfactant composition according to any of claims 1 or 2, characterized in that the gemini surfactant has the general formula (B.II)

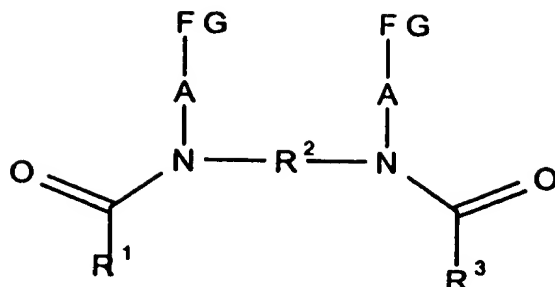


wherein the substituents have the meanings as defined by the general formula (B.I) and

- R⁵, R⁶** represent C₆- to C₃₆-alkyl group that can be branched, unbranched, saturated, or unsaturated as far as not adjacently diunsaturated;
- X** is an alkylene- or alkenylene group having from 1 to 6 carbon atoms, which may be substituted with a hydroxyl group or a sulfonic acid group or a carboxy group;
- Y¹** is a sulfonate group, a sulfate group, or a carboxyl group; and
- Y²** represents a hydroxyl group, a sulfuric acid residue, or -O-(CO)X-COOH.

19. (Original) A surfactant composition according to any of claims 1 or 2, characterized in that the gemini surfactant has the general formula (B.III)

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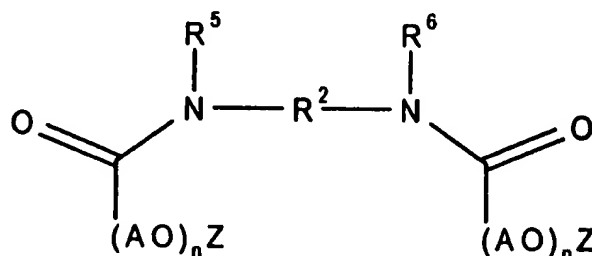


(B.III),

wherein the substituents have the meanings as defined by the general formula (B.I) and

FG represents -COOM or -SO₃M.

20. (Original) A surfactant composition according to any of claims 1 or 2, characterized in that the gemini surfactant has the general formula (B.IV)



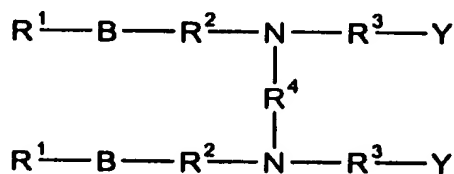
(B.IV),

wherein the substituents have the meanings as defined by the general formulas (B.I) and (B.II), and

AO represents alkylene oxide units wherein $n = 1$ to 20; and

Z is -SO₃M, -C₂H₄SO₃M, -C₃H₆SO₃M, -P(O)(OM)₂, -CH₂-COOM, or -C₂H₄-COOM.

21. (Original) A surfactant composition according to any of claims 1 or 2, characterized in that the gemini surfactant has the general formula (C.I),

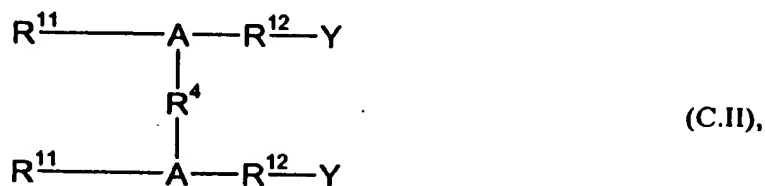


(C.I)

wherein the substituents have the following meanings:

- R¹** C₃- to C₂₅-alkyl group that can be branched, unbranched, saturated, or unsaturated as far as not adjacently diunsaturated, hydroxy-substituted, or perfluorinated;
- R²** C₁- to C₁₂-alkylene or hydroxy-substituted derivatives thereof;
- B** an amide group, a carboxyl group, or a polyether group;
- R⁵** C₁- to C₄-alkyl, hydroxy-substituted alkyl, or H;
- R⁶** C₂- to C₄-alkylene;
- x** a number from 1 to 20;
- R³** C₁- to C₁₂-alkyl, hydroxy-substituted derivatives thereof, R⁷-D-R⁷, or a polyether group having the formula [-O(R⁶-O)_x-] wherein x is from 1 to 30;
- R⁷** C₁- to C₆- alkylene or hydroxy-substituted derivatives thereof;
- D** -O-, -S-, -N(R⁸)-;
- R⁴** alkylene, alkylaryl having from 1 to 12 carbon atoms, the hydroxy-substituted derivatives thereof, or R⁹-D¹-R⁹;
- R⁸** C₁- to C₁₂-alkyl, hydroxy-substituted alkyl, H, or R⁹-D¹-R⁹;
- R⁹** C₁- to C₆-alkylene, hydroxy-substituted derivatives thereof, or aryl;
- D¹** -O-, -S-, -SO₂-, -C(O)-, [-O(R⁷-O)_x-] wherein x is from 1 to 30, (R¹⁰)_t[N(R¹⁰)]_z, or aryl;
- R¹⁰** C₁- to C₁₂-alkyl, hydroxy-substituted alkyl, H, or aryl;
- t, z** are independently a number from 1 to 4; and
- Y** is independently -SO₃H, O-SO₃H, -OP(O)(OH)₂, -P(O)(OH)₂, -COOH, -CO₂-C₆H₄-SO₃H, or the salts thereof.

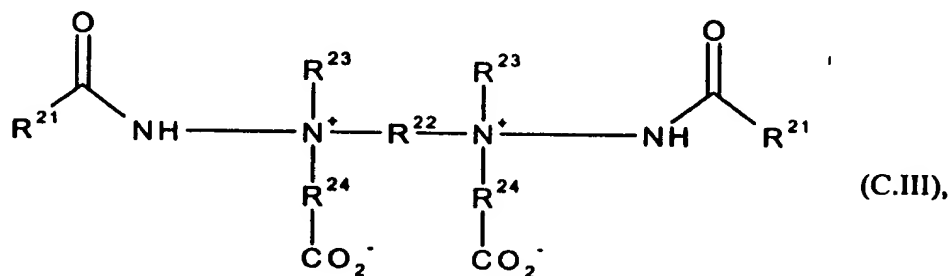
22. (Original) A surfactant composition according to any of claims 1 or 2, characterized in that the gemini surfactant has the general formula (C.II)



wherein the substituents have the meanings as defined by the general formula (C.I) and

- R¹¹** is C₅- to C₂₃-alkyl group that can be branched, unbranched, saturated, unsaturated as far as not adjacently diunsaturated, hydroxy-substituted, perfluorinated, or R¹⁴-B-R²;
- R¹⁴** is C₁- to C₁₂-alkyl group that can be branched, unbranched, saturated, unsaturated as far as not adjacently diunsaturated, or the hydroxy-substituted derivatives thereof;
- R¹²** means C₁- to C₁₂-alkylene group that can be branched, unbranched, saturated, unsaturated as far as not adjacently diunsaturated, the hydroxy-substituted derivatives, an amide group, a carboxyl group, a polyether group, or R⁹-D¹-R⁹; and
- A** is -CR⁶= or -N=, if whenever A is equal to -N=, R¹¹ represents R¹⁴-B-R².

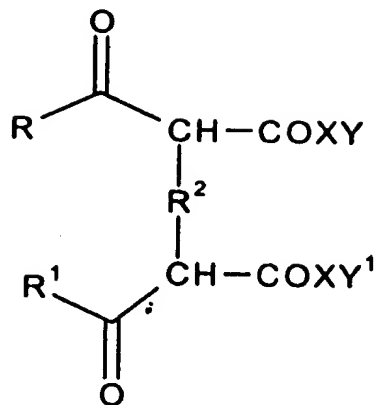
23. (Original) A surfactant composition according to any of claims 1 or 2, characterized in that the gemini surfactant has the general formula (C.III)



wherein the substituents have the meanings as defined by the general formulas (C.I) and (C.II) and

- R²¹** represents C₅- to C₂₃-alkyl, branched, unbranched, saturated, or unsaturated as far as not adjacently diunsaturated;
- R²², R²⁴** are C₁- to C₆-alkylene and
- R²³** is methyl, ethyl, propyl, or a polyether group.

24. (Original) A surfactant composition according to one of claims 1 or 2, characterized in that the gemini surfactant has the general formula (D.I)

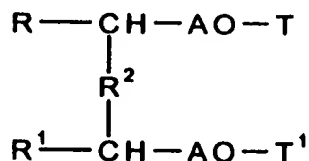


(D.I),

wherein the substituents have the following meanings:

- R, R¹** C₃- to C₃₀-alkyl, branched or unbranched, saturated, optionally unsaturated as far as not adjacently diunsaturated, hydroxy-substituted or perfluorinated;
- R²** C₁- to C₁₀-alkylene, arylene, or the hydroxy-substituted derivatives thereof, a polyether [-O(R⁴O)_x-], -S-, -SO₂-, -O-, -S-S-, -O-R⁵-O-, or -S-R⁵-S-; variable for a direct bond between the two α-carbons;
- R⁴** C₂- to C₄-alkylene;
- R⁵** C₁- to C₁₀-alkylene, arylene, or alkyl arylene, -N(R⁶)-, or -(NR⁶)-R⁷-(NR⁶)-;
- R⁶** C₁- to C₆-alkyl;
- R⁷** C₁- to C₆-alkyl, wherein R⁷ and R⁶ can also be part of a heterocyclic ring;
- X** polyether having the formula [-O(R⁴O)_x-], wherein x is a number from 1 to 30, -O-, NZ;
- Z** C₁- to C₁₀-alkyl, aryl, alkylaryl, or H, and
- Y, Y¹** are independently H, -CH₂-COOH and salts, a hydrocarbon radical having at least two hydroxyl groups.

25. (Original) A surfactant composition according to one of claims 1 or 2, characterized in that the gemini surfactant has the general formula (D.II)

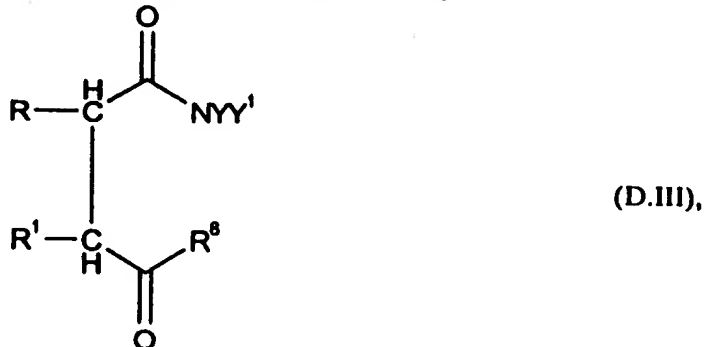


(D.II),

wherein the substituents have the meanings as defined by the general formula (D.I) and

AO means $-C(O)-$, $-C(O)-[-O(R^4O)_x-]$, $-CH_2-[-O(R^4O)_x-]$, $-CH_2-O-$;
T, T' are independently $-OM$, $-H$, $-CH_3$, $-C_2H_5$, $-SO_3M$, $-CH_2COOM$,
 $-C_2H_4-COOM$, $-C_3H_6-SO_3M$, $-O-P(O)(OM)_2$ and
M is alkali, $\frac{1}{2}$ alkaline earth, ammonium, mono-, di-,
 trialkanolammonium, or H.

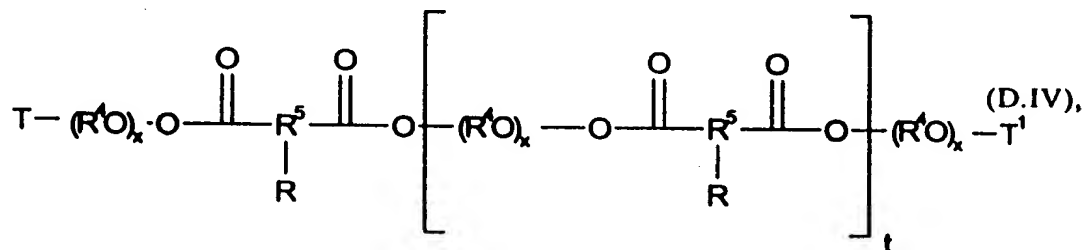
26. (Original) A surfactant composition according to any of claims 1 or 2, characterized in that the gemini surfactant has the general formula (D.III)



wherein the substituents have the meanings as defined by the general formulas (D.I) and (D.II), and

R^8 represents NYY^1 , $-O(R^4O)_xH$ or
 $-O(R^4O)_x-C(O)-CHR-CHR^1-C(O)NYY^1$.

27. (Original) A surfactant composition according to any of claims 1 or 2, characterized in that the gemini surfactant has the general formula (D.IV)



wherein the substituents have the meanings as defined by the general formula (D.I), (D.II), and (D.III), and

t is an integer from 1 to 100.

28. (Original) A surfactant composition according to any of claims 1 or 2, characterized in that the surfactant composition comprises a gemini surfactant of the general

formula (AI) as component (A) and sulfosuccinate, acyllactylate, alkyl isethionates, betaines, acylglutamates, and mixtures thereof as component (B).

29. (Original) A surfactant composition according to any of claims 1 or 2, characterized in that the surfactant composition comprises a gemini surfactant of the general formula (AIII) as component (A) and acyllactylates, acylglutamates, and mixtures thereof as component (B).
30. (Original) A surfactant composition according to any of claims 1 or 2, characterized in that the surfactant composition comprises a gemini surfactant of the general formula (CII) as component (A) and acyllactylates, acylglutamates, alkyl isethionates, and mixtures thereof as component (B).
31. (Original) A surfactant composition according to any of claims 1 or 2, characterized in that the surfactant composition comprises a gemini surfactant of the general formula (DI) as component (A) and acyllactylates, acylglutamates, alkyl isethionates, and mixtures thereof as component (B).
32. (Original) A surfactant composition according to any of claims 1 or 2, characterized in that the surfactant composition comprises a gemini surfactant of the general formula (DI) as component (A) and acyllactylates, acylglutamates, alkyl isethionates, and mixtures thereof as component (B).
33. (Original) The surfactant composition of claim 8 wherein the oligomerization degree of the lactic acid is in the range of from 1.1 to 4.
34. (Original) The surfactant composition of any of claims 1 or 2 wherein said gemini surfactant comprises a hydrophilic double (head) group comprising at least one alkoxyated residue bearing a group selected from sulfonic acid-, carboxylic acid-, phosphonic acid-, polyalcohol-, polyalkylene-oxide group, salts thereof, and mixtures thereof.
35. (Original) The surfactant composition of any of claims 1 or 11 wherein said gemini surfactant comprises a hydrophilic double (head) group comprising at least one alkoxyated residue bearing a group selected from sulfonic acid-, carboxylic

acid-, phosphonic acid-, polyalcohol-, polyalkylene-oxide group, salts thereof, and mixtures thereof.

36. (Original) The surfactant composition of claim 12 wherein said anionic surfactant are anionic surfactants.
37. (Original) The surfactant composition of claim 13 wherein the components (A) and (B) are present in the whole composition in the total amount of from 0.1 to 10 wt%.
38. (Original) The surfactant composition of claim 20 wherein said alkylene oxide units comprise a single alkylene oxide species.
39. (Original) The surfactant composition of claim 20 wherein said alkylene oxide units comprise mixed species.
40. (Original) The surfactant composition of claim 39 wherein said alkylene oxide units are randomly arranged.
41. (Original) The surfactant composition of claim 39 wherein said alkylene oxide units are in block form.
42. (Original) The surfactant composition of claim 24 wherein said hydrocarbon radical having at least two hydroxyl groups is selected from the class consisting of erythrose, threose, ribose, arabinose, xylose, fructose, lyxose, allose, altrose, glucose, mannose, galactose, and mixtures thereof.
43. (Original) The surfactant composition of claim 27 wherein t is from 1 to 20.
44. (Original) The surfactant composition of claim 43 wherein t is from 1 to 4.
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